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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G11B 7/24, C07C 69/753	A1	(11) International Publication Number: WO 98/26412 (43) International Publication Date: 18 June 1998 (18.06.98)
(21) International Application Number: PCT/IB96/01410 (22) International Filing Date: 10 December 1996 (10.12.96) (71) Applicant (for all designated States except US): KANTON ZÜRICH VERTRETEN DURCH DIE UNIVERSITÄT ZÜRICH [CH/CH]; Winterthurerstrasse 190, CH-8057 Zürich (CH). (72) Inventor; and (75) Inventor/Applicant (for US only): HANSEN, Hans-Jürgen [DE/CH]; Frohburgstrasse 101, CH-8006 Zürich (CH). (74) Agent: E. BLUM & CO.; Vorderberg 11, CH-8044 Zürich (CH).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: DOUBLE-BOND SHIFTS OF SUBSTITUTED (4N)-ANNULENES FOR INFORMATION STORAGE AND DATA PROCESSING (57) Abstract <p>The present application describes a method for information storage and data processing comprising the steps of thermo inducing or photo inducing double-bond shifts (DBS) in substituted (4n)-annulenes thus generating transitions between two different conjugation states with at least one substituent. The two different conjugation states are the conjugation on-state and conjugation off-state of the annulene core π-electrons with the substituent π-electrons. The present invention is furthermore related to novel substituted (4n)-heptalenes being optically and/or thermally switchable, based on thermal or photochemical double-bond shifts (DBS) as well as methods for their preparation. The (4n)-heptalenes can be used for information storage and data processing devices.</p>		

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